VOLUNTARY, OCCUPATIONAL PENSIONS

Occupational pension schemes, voluntarily provided by employers, are common in many OECD countries. This section shows detailed results on the value of these pension entitlements for four countries: Canada, Denmark, the United Kingdom and the United States. These four countries were chosen for three reasons. First, coverage of occupational pensions is broad: around one third of employees in Canada, a little under half in the United Kingdom and the United States and around 80% in Denmark. Secondly, occupational pensions play an important role in providing retirement incomes. Thirdly, data are available on the rules and parameters of different employers' plans for these countries. ^{2, 3}

The analysis of the four countries that follows is presented in the same format as the country studies that discuss mandatory pension systems. These provide detailed descriptions of the rules and parameters chosen for the representative pension plan and the justification for that choice. The table below offers a cross-country summary of these provisions for the three countries where defined-benefit pension systems have been modelled. In Denmark, occupational pensions are of the defined-contribution type.

It is also important to note that defined-benefit occupational plans often have more generous rules for age of retirement than do national programmes. For comparison with other countries and with the results of mandatory pensions only, it is again assumed that people retire at the normal pension age of the public scheme. In practice, earlier retirement will result in lower benefits because of the smaller number of years over which pension accrues.

Parameters and rules for defined-benefit occupational pensions

	Canada	United Kingdom	United States
Earnings measure	Final salary (70%)	Final salary (95%)	Final salary (55%)
Vesting	5 years' service	2 years' service	5 years' service
Pension age	65	65	65 (47%)
Accrual rate	2% a year (70%)	1.25% a year (65%)	1.5% a year
Integration method	1.3% accrual up to public ceiling	-	-
Pre-retirement preservation	None	Price inflation	None
Post-retirement benefit adjustment	Half price inflation	Price inflation	None

Notes

- 1. See OECD (2001), Table 6.2 and Johnson (1998), Table 3.3.
- 2. The data for Canada come from OECD (1995). For the United Kingdom, data are drawn principally from the National Association of Pension Funds annual survey. The Government Actuary's survey is published with a huge delay, with 1995 data only available in 2001. Disney and Whitehouse (1994, 1996) provide simulations of pension entitlements for a range of different scheme rules and parameters. Data for the United States come mainly from Mitchell and Dykes (2000), which is based on a survey of schemes by the Department of Labor; see also Department of Labor (1999).
- 3. In other countries with broad coverage of occupational pensions such as Germany, Japan and Switzerland there have been no surveys of employer pension plans. It is impossible, therefore, to model with any degree of certainty the rules of a "typical" scheme.

Bibliography

- Aldrich, J. (1982), "The Earnings Replacement Rate of Old-age Benefits in Twelve Countries: 1969-1980", Social Security Bulletin, Vol. 45, No. 11, pp. 3-11.
- Blanchard, O.J. (1993), "The Vanishing Equity Premium", in R. O'Brien (ed.), Finance and the International Economy 7, Oxford University Press.
- Bodie, Z. (1995), "On the Risk of Stocks in the Long Run", Financial Analysts' Journal, May-June, pp. 18-22.
- Casey, B., H. Oxley, E.R. Whitehouse, P. Antolín, R. Duval and W. Leibfritz (2003), "Policies for an Ageing Society: Recent Measures and Areas for Further Reform", Economics Department Working Paper No. 369, OECD, Paris.
- Cichon, M. (1999), "Notional Defined-contribution Schemes: Old Wine in new Bottles?", *International Social Security Review*, Vol. 52, No. 4, pp. 87-105.
- Constantinides, G., J. Donaldson and R. Mehra (1998), "'Junior Can't Borrow' A New Perspective on the Equity Premium Puzzle", Working Paper No. 6617, National Bureau of Economic Research, Cambridge.
- Dang, T.T., P. Antolín and H. Oxley (2001), "Fiscal Implications of Ageing: Projections of Age-related Spending", Working Paper No. 305, Economics Department, OECD, Paris.
- Diamond, P.A. (1997), "Insulation of Pensions from Political Risk", in S. Valdés-Prieto (ed.), The Economics of Pensions: Principles, Policies and International Experience, Cambridge University Press.
- Disney, R.F. (1999), "Notional Accounts as a Pension Reform Strategy: an Evaluation", Pension Reform Primer Series, Social Protection Discussion Paper No. 9928, World Bank, Washington, D.C.
- Disney, R.F. and P.G. Johnson (eds.) (2001), Pension Systems and Retirement Incomes Across OECD Countries, Edward Elgar, Aldershot.
- Disney, R.F. and Whitehouse, E.R. (1994), "Choice of Private Pension and Pension Benefits in Britain", Working Paper No. 94/2, Institute for Fiscal Studies, London.
- Disney, R.F. and E.R. Whitehouse (1996), "What are Pension Plan Entitlements Worth in Britain?", Economica, Vol. 63, pp. 213-238.
- Disney, R.F. and E.R. Whitehouse (1999), "Pension Plans and Retirement Incentives", Pension Reform Primer Series, Social Protection Discussion Paper No. 9924, World Bank, Washington, D.C.
- Disney, R.F. and E.R. Whitehouse (2001), Cross-Country Comparisons of Pensioners' Incomes, Report Series No. 142, Department for Work and Pensions, London.
- Eurostat (1993), Old Age Replacement Ratios, Vol. 1, Relation between Pensions and Income from Employment at the Moment of Retirement, Statistical Office of the European Communities, Luxembourg.
- Finkelstein, A. and J. Poterba (2002), "Selection Effects in the United Kingdom Individual Annuities Market", Economic Journal, Vol. 112, No. 476, pp. 28-50.
- Finkelstein, A. and J. Poterba (2004), "Adverse Selection in Insurance Markets: Policyholder Evidence from the UK Annuity Market", Journal of Political Economy, Vol. 112, No. 1, pp. 183-208.
- Förster, M.F. and M. Mira d'Ercole (2005), "Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s", Social, Employment and Migration Working Paper, No. 22, OECD, Paris.
- Hernanz, V., F. Malherbert and M. Pellizzari (2004), "Take-up of Welfare Benefits in OECD Countries: a Review of the Evidence", Social, Employment and Migration Working Paper No. 17, OECD, Paris.
- Ippolito, R. (1991), "Encouraging Long Tenure: Wage Tilt or Pensions", Industrial and Labor Relations Review, Vol. 44, No. 3.

- Jagannathan, R. and N. Kocherlakota (1996), "Why Should Older People Invest Less in Stocks than Younger People?", Federal Reserve Bank of Minneapolis Quarterly Review, Vol. 20, No. 3, Summer.
- Johnson, P.G. (1998), Older Getting Wiser, Institute of Chartered Accountants in Australia.
- Keenay, G. and E.R. Whitehouse (2002a), "Taxing Pensioners", in Taxing Wages, OECD, Paris.
- Keenay, G. and E.R. Whitehouse (2002b), "The Role of the Personal Tax System in Old-age Support: a Survey of 15 Countries", Discussion Paper No. 02/07, Centre for Pensions and Superannuation, University of New South Wales, Sydney.
- Keenay, G. and E.R. Whitehouse (2003a), "Financial Resources and Retirement in Nine OECD Countries: the Role of the Tax System", Social, Employment and Migration Working Paper No. 8, OECD, Paris.
- Keenay, G. and E.R. Whitehouse (2003b), "The Role of the Personal Tax System in Old-age Support: a Survey of 15 Countries", Fiscal Studies, Vol. 24, No. 1, pp. 1-21.
- Lazear, E. (1981), "Agency, Earnings Profiles, Productivity and Hours Restrictions", American Economic Review, Vol. 71, pp. 606-620.
- Lazear, E. (1985), "Incentive Effects of Pensions", in D. Wise (ed.), Pensions, Labor and Individual Choice, University of Chicago Press for National Bureau of Economic Research.
- McHale, J. (1999), "The Risk of Social Security Benefit Rule Changes: Some International Evidence", Working Paper No. 7031, National Bureau of Economic Research, Cambridge, Mass.
- Mehra, R. and E.C. Prescott (1985), "The Equity Premium: a puzzle", Journal of Monetary Economics, Vol. 15, pp. 145-161.
- Mitchell, O.S. and E.L. Dykes (2000), "New Trends in Pension Benefit and Retirement Provisions", Working Paper No. 2000-1, Pension Research Council, Wharton School, University of Pennsylvania, Philadelphia.
- OECD (1995), Private Pensions in OECD Countries: Canada, Social Policy Studies No. 15, Paris.
- OECD (2001), Ageing and Income. Financial Resources and Retirement in Nine OECD Countries, Paris.
- OECD (2003), Taxing Wages, Paris.
- OECD (2004), OECD Classification and Glossary of Private Pensions, Paris.
- OECD (2005), Taxing Wages, Paris.
- Palacios, R.J. and E.R. Whitehouse (2000), "Guarantees: Counting the Cost of Guaranteeing Defined Contribution Pensions", Pension Reform Primer briefing note, World Bank, Washington, D.C.
- Palacios, R.J. and E.R. Whitehouse (2005), "Civil-service Pension Schemes Around the World", Pension Reform Primer series, Social Protection Discussion Paper, World Bank, Washington, D.C., forthcoming.
- Pennachi, G.G. (1998), "Government Guarantees on Funded Pension Returns", Pension Reform Primer series, Social Protection Discussion Paper No. 9806, World Bank.
- Turner, J.A. and D.M. Rajnes (2000), "Limiting Worker Financial Risk Through Risk Sharing: Minimum Rate of Return Guarantees for Mandatory Defined Contribution Plans", International Labour Organisation, Geneva.
- United Kingdom, Department of Work and Pensions (2003), "Income Related Benefits Estimates of Take-up 2000-2001", London.
- United Kingdom, Government Actuary's Department (2003), Occupational Pension Schemes in 2000: Eleventh Survey by the Government Actuary.
- United States, Department of Labor (1999), Private Pension Plan Bulletin: Abstract of 1996 Form 5 500 Annual Reports, Pension and Welfare Benefits Administration, Washington, D.C.
- Viscusi, W.K. (1985), "The Structure of Uncertainty and the Use of Pensions as a Mobility-reduction Device", in D. Wise (ed.), Pensions, Labor and Individual Choice, University of Chicago Press for National Bureau of Economic Research.
- Vordring, H. and Goudswaard, K. (1997), "Indexation of Public Pension Benefits on a Legal Basis: Some Experiences in European Countries", International Social Security Review, Vol. 50, No. 3, pp. 31-44.
- Weaver, R.K. (1988), Automatic Government: The Politics of Indexation, Brookings Institution, Washington, D.C.
- Whiteford, P. (1995), "The Use of Replacement Rates in International Comparisons of Benefit Systems", International Social Security Review, Vol. 48, No. 2.

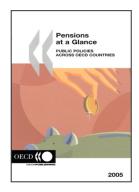
- Whitehouse, E.R. (1998), "Pension Reform in Britain", Pension Reform primer series, Social Protection Discussion Paper No. 9810, World Bank, Washington, D.C.
- Whitehouse, E.R. (2000), "Administrative Charges for Funded Pensions: Measurement Concepts, International Comparison and Assessment", *Journal of Applied Social Science Studies*, Vol. 120, No. 3, pp. 311-361.
- Whitehouse, E.R. (2001), "Administrative Charges for Funded Pensions: Comparison and Assessment of 13 Countries", in Private Pension Systems: Administrative Costs and Reforms, Private Pensions Series, Vol. 3, OECD, Paris.
- Whitehouse, E.R. (2002), "Pension Systems in 15 Countries Compared: the Value of Entitlements", Discussion Paper No. 02/04, Centre for Pensions and Superannuation, University of New South Wales, Sydney.
- Whitehouse, E.R. (2005a), "Pension Policy Around the World: Vol. 1, High-income OECD Countries", Social Protection Discussion Paper, World Bank, Washington, D.C.
- Whitehouse, E.R. (2005b), "Pension Policy Around the World: Vol. 2, Eastern Europe and Central Asia", Social Protection Discussion Paper, World Bank, Washington, D.C.
- Whitehouse, E.R. (2005c), "Pension Policy Around the World: Vol. 3, Latin American and Caribbean", Social Protection Discussion Paper, World Bank, Washington, D.C.
- Whitehouse, E.R. and R.J. Palacios (2005), "Pension Policy Around the World: Vol. 5, South Asian Civil-service Schemes", Social Protection Discussion Paper, World Bank, Washington, D.C.
- Whitehouse, E.R. and D. Robalino (2005), "Pension Policy Around the World: Vol. 4, Middle East and North Africa", Social Protection Discussion Paper, World Bank, Washington, D.C.
- World Bank (1994), Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth, Oxford University Press.

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